

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Popescu, et al.

Examiner: Rosanne Kosson

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For: METHOD OF CURL RETENTION
IN HAIR AND LASHES

Confirmation No.: 9085

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION UNDER 37 C.F.R. 1.132

Sir/Madam:

I, Geoffrey Hawkins, hereby declare and state that:

1. I am a U.S. citizen, residing at Yardley, PA.
2. I am a co-inventor for U.S. Patent Application No. 10/728,508 filed on December 5, 2003 for "METHOD OF CURL RETENTION IN HAIR AND LASHES."
3. I have been employed by Estée Lauder, Inc. since 2001 and I am currently a Vice President in charge of the New Ventures Laboratory. During my

employment at Estée Lauder, Inc., I have been engaged in research and development regarding eye makeup products.

4. Given my education and experience, particularly in the area of eye makeup products, I consider myself able to provide the following testimony based on the additional experiments conducted for U.S. Patent Application No. 10/728,508.
5. Comparative testing was performed with an inventive eyelash treatment composition 1 containing transglutaminase and a comparative eyelash treatment composition 2 free of transglutaminase. The formulations of compositions 1 and 2 are summarized in the following Tables I and II.

Table 1 – Inventive Eyelash Treatment Composition 1

Component	Amount (wt%)
Deionized water	88.300
Carbomer	0.100
Hydroxypropyl methylcellulose	0.388
Hydroxyethylcellulose	1.150
Ammonium hydroxide	0.050
Glycerin	2.000
Butylene glycol	6.000
Phenoxyethanol	0.920
Transglutaminase	0.010
Maltodextrin	0.990
Sodium chloride	0.002

Table 2 – Comparative Eyelash Treatment Composition 2

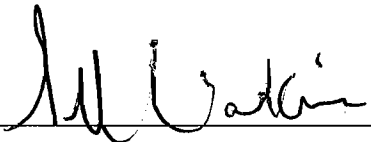
Component	Amount (wt%)
Deionized water	89.300
Carbomer	0.100
Hydroxypropyl methylcellulose	0.388
Hydroxyethylcellulose	1.150
Ammonium hydroxide	0.050
Glycerin	2.000
Butylene glycol	6.000
Phenoxyethanol	0.920
Sodium chloride	0.002

6. An expert panel consisted of 50 women were selected and divided into Groups 1-5 of 10 panelists each. The panelists were instructed to wear no makeup or moisturizer on the day of testing, and the initial curliness of the eyelashes of each panelist was measured. The panelists were then provided with a lash treatment product and were instructed to apply the provided product to the upper lashes one time daily for seven days. Specifically, the panelists of Group 1 were provided with a product containing the comparative eyelash treatment composition 2 stored at about 25°C; the panelists of Group 2 were provided with a product containing the inventive eyelash treatment composition 1 stored at about 25°C; the panelists of Group 3 were provided with a product containing the inventive eyelash treatment composition 1 stored at about 4°C; the panelists of Group 4 were provided with a product containing the inventive eyelash treatment composition 1 stored at about 40°C; and the panelists of Group 4 were provided with a product containing the inventive eyelash treatment composition 1 stored at about 50°C. The panelists were not allowed to apply mascara over the product.
7. After 24 hours from the first application of the provided product, the panelists were called back to the lab, and the curliness of the eyelashes of each panelist was measured.
8. At the end of the seven-day period, the panelists were again called back to the lab, and the curliness of the eyelashes of each panelist was again measured.
9. The average increase of lash curliness in each group of panelists is shown hereinafter in Table 3:

Table 3 – Increase in Lash Curliness

Group	Product	Increase in Lash Curliness	
		24 Hours	7 Days
1	No transglutaminase (25°C)	No significant	No significant
2	Transglutaminase (25°C)	6.6°	9.7°
3	Transglutaminase (4°C)	6.7°	9.8°
4	Transglutaminase (40°C)	5.6°	6.5°
5	Transglutaminase (50°C)	Not significant	Not significant

10. As shown in Table 3 hereinabove, the comparative composition 2 containing no transglutaminase did not result in significant increase of lash curliness, while the inventive composition 1 containing transglutaminase stored at various temperatures ranging from about 4°C to about 40°C caused significant increase of lash curliness. However, when the storage temperature was too high (e.g., $\geq 50^{\circ}\text{C}$), the enzyme became denatured and was no longer effective in enhancing the curliness of the eyelashes.
11. I further declare that all statements made herein of my own knowledge are true, that all statements made on information and belief are believed to be true, and that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

By: 
Geoffrey Hawkins

Date: 8/8/07